FlyBy Math™ Alignment
Idaho Achievement Standards
Mathematics 2-1-06

Standard 1: Number and Operation

Goal 1.1: Understand and use numbers. Perform computations accurately

Objective(s)	*FlyBy Math*™ Activities
6.M.1.1.6 Solve problems using the 4-step process of problem solving (explore, plan, solve, and examine). (318.01 b)	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Goal 1.2: Perform computations accurately

Objective(s)	*FlyBy Math*™ Activities
6.M.1.2.7 Use a variety of strategies to solve real life problems. (318.01 a)	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation. --Use tables, graphs, and equations to solve aircraft conflict problems. --Compare predictions, calculations, and experimental evidence for several aircraft conflict problems.

Goal 1.3: Estimate and judge reasonableness of results.

Objective(s)	*FlyBy Math*™ Activities
6.M.1.3.1 Estimate to predict computation results. (317.03 a)	--Predict outcomes and explain results of mathematical models and experiments.

Standard 2: Concepts and Principles of Measurement

Goal 2.1: Understand and use customary and metric measurements.

Objective(s)	*FlyBy Math*™ Activities
6.M.2.1.1 Select and use appropriate units and tools to make formal measurements in both systems. (319.01.a)	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.
6.M.2.1.2 Apply estimation of measurement to real-world and content problems using standard measuring devices. (319.01.b)	--Predict outcomes and explain results of mathematical models and experiments. --Compare predictions, calculations, and experimental evidence for several aircraft conflict problems..

6.M.2.1.3 Apply understanding of relationships to solve real-world problems related to elapsed time. (319.01.f)	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
Goal 2.2: Apply the concepts of rates, ratios, and proportions.	
Objective(s)	***FlyBy Math™* Activities**
6.M.2.2.1 Identify and write ratios and scales (on a map). (319.03.a)	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Standard 3: Concepts and Language of Algebra and Functions

Goal 3.4: Understand the concept of functions.	
Objective(s)	***FlyBy Math™* Activities**
6.M.3.4.3 Use mathematical models to show change in real context. (323.01.c)	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. --Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates. --Interpret the slope of a line in the context of a distance-rate-time problem.
Goal 3.6: Apply functions to a variety of problems.	
Objective(s)	***FlyBy Math™* Activities**
6.M.3.6.1 Use patterns to represent and solve simple problems.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Standard 4: Concepts and Principles of Geometry

Goal 4.3: Apply graphing in two dimensions.	
Objective(s)	***FlyBy Math™* Activities**
6.M.4.3.1 Identify and plot points in the first quadrant on a coordinate plane. (321.02.a)	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

Standard 5: Data Analysis, Probability, and Statistics	
Goal 5.1: Understand data analysis.	
Objective(s) **6.M.5.1.1** Read and interpret tables, charts and graphs, including line graphs, bar graphs, frequency line or line plot, and circle graph. (322.01a)	***FlyBy Math™* Activities** --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs. --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.
6.M.5.1.2 Explain and justify stated conclusions drawn from tables, charts, and graphs. (322.01.b)	--Explain and justify solutions regarding the motion of two airplanes using the results of plotting points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system.
Goal 5.2: Collect, organize, and display data.	
Objective(s) **6.M.5.2.1** Collect, organize, and display the data with appropriate notation in tables, charts, and graphs, including broken line graphs, bar graphs, frequency tables and line plots (322.02a)	***FlyBy Math™* Activities** --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs. --Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.
Goal 5.5: Make predictions or decisions based on data.	
Objective(s) **6.M.5.5.1** Make predictions based on data. (318.01.c)	***FlyBy Math™* Activities** --Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.